Doc Code: AP.PRE.REQ

PRE-APPEAL BRIEF REQUEST FOR REVIEW	**Docket Number:** SJO920010108US1	
I hereby certify that this correspondence is being transmitted via the EFS-Web System to the USPTO on: November 13, 2007 Signature: /David Victor/ Typed or Printed Name: David W. Victor	**Application Number:** 09/972,310	**Filed:** October 5, 2001
	First Named Inventor: G.T. AXBERG et al.	
	Art Unit: 2145	**Examiner:** Azizul Q. Choudhury

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached five (5) sheet(s).
     Note: No more than five (5) pages may be provided.

I am the:

                                   /David Victor/
                                     Signature

☐   applicant/inventor

☐   assignee of record of the entire interest.   David W. Victor
     See 37 CFR 3.71. Statement under 37 CFR 3.73(b)   Typed or Printed Name
     is enclosed. (Form PTO/SB/96)

☒   attorney or agent of record.   (310) 553-7977
     Registration Number Registration No. 39,867   Telephone Number

☐   attorney or agent acting under 37 CFR 1.34   November 13, 2007
     Registration number if acting under 37 CFR 1.34   Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required*.

Applicant(s):	G.T. AXBERG et al.	Examiner	Azizul Q. Choudhury
Serial No.	09/972,310	Group Art Unit	2145
Filed	October 5, 2001	Docket No.	SJO920010108US1
TITLE	STORAGE AREA NETWORK METHODS AND APPARATUS WITH EVENT NOTIFICATION CONFLICT RESOLUTION		

PRE-APPEAL BRIEF REQUEST FOR REVIEW ARGUMENTS

Applicants request review of the Examiner's rejection of claims 1-23 as obvious (35 U.S.C. §103(a)) over Crockett (U.S. Patent No. 5,504,861) in view of Callon (U.S. Patent No. 6,999,459) and Dias (U.S. patent No. 5,805,785) for the following reasons.

With respect to claims 1 and 10, Applicants submit that a review reveals that the cited references alone and in combination do not teach or suggest the claim requirements that the first component sends a notification to a second component that causes the second component to access the first representation at the first component, determine a discrepancy and disregard the notification or recover the second representation from attributes of the first representation in response to determining the discrepancy. Further, there is no teaching that disregarding the discrepancy comprises taking no action to synchronize the first and second representations in response to the event notification.

The cited col. 2, lines 58-62 and col. 7, lines 34-44 of Crockett (Final Office Action, pg. 3) mentions that an object is to provide a design to shadow write updates at a primary site to a secondary site so that the writes to the secondary site are optimized with full recovery capabilities. The cited col. 7 mentions specific sense information from the primary storage controller regarding the failure of an I/O write operation. An I/O ERP (error recovery program) on the primary controller may perform peer-to-peer synchronization error recovery to maintain data integrity between a primary and secondary storage controller.

Although the cited Crockett discusses maintaining data integrity between two sites where data is maintained, the cited Crockett nowhere teaches or suggests the specific claim requirements where the second component receives a notification, and in response the second component accesses the first representation, determines a discrepancy between an event notification indicative of a topology change, and then selectively disregards the event notification or recovers the second representation in response to the discrepancy. Instead, the

cited Crockett discusses how updates are transmitted asynchronously from a primary site to a secondary site.

Further, the cited col. 7 of Crockett discusses error recovery performed at the primary controller to synchronize for an error recovery. The I/O ERP 2 is on the primary controller, see, FIG. 1. This does not teach or suggest that the second component to be updated, which the Examiner likens to the secondary site, receives an event notification of a change and then performs the claimed operations of accessing the first representation, determining a discrepancy between an event notification indicative of a topology change, and then selectively disregarding the event notification or recover the second representation in response to the discrepancy.

Moreover, this rejection should be withdrawn because Crockett teaches away from the claimed technique for providing the topology changes to the second representation. Crockett mentions that the primary storage controllers each group their respective record updates for an asynchronous remote data shadowing session and provide those record updates to the PDM. (Crockett, col. 10, lines 54-65). Thus, in Crockett the primary controller initiates the transferring of updates by providing the updates, whereas the claims require that the first component sends a notification to a second component that causes the second component to access the first representation at the first component, determine a discrepancy and disregard the notification or recover the second representation from attributes of the first representation in response to determining the discrepancy.

Applicants further request review of the cited col. 7, lines 37-39 of Callon. (Final Office Action, pg. 3) Callon mentions that a notification is provided to switching nodes that a communication link has failed to allow the nodes to update their network topology database. (Callon, col. 7, lines 29-35) The cited col. 7 mentions that a switching node notifies a network manager to determine the cause of a failure or notification. Nowhere does the cited Callon teach or suggest that in response to a notification of a change to the topology, that the notified component performs the operations of accessing the first representation, determining a discrepancy between an event notification indicative of a topology change, and then selectively disregarding the event notification or recovering the second representation in response to the discrepancy. Instead, notifies a network manager to determine the course of action.

Applicants further request review of the citation to col. 2, lines 28-33 of Dias as teaching the requirements of the claim concerning filtering events to ensure that needless events are not

acted on. (Final Office Action, pg. 3) The cited col. 2 of Dias mentions that events detected by monitors are sent to event handlers. The event handlers process events by filtering them through such activities as event correlation, removal of duplicate events, and rollup. However, as with the other cited references, nowhere does the cited col. 2 anywhere teach or suggest that in response to a notification of a change to the topology, that the notified component performs the operations of accessing the first representation, determining a discrepancy between an event notification indicative of a topology change, and then selectively disregarding the event notification or recovering the second representation in response to the discrepancy. Instead, the cited col. 2 discusses filtering events in general.

Applicants further submit that combining the different teachings of the references does not teach or suggest the claimed combination. The proposed combination of the cited references produces a system that shadows updates between a primary site and secondary site (Crockett) with providing a notification to the nodes that a communication link has failed to allow the nodes to update their network topology (Callon) and that uses event handlers to process events (Dias). This proposed combination nowhere teaches or suggest that the first component sends a notification to a second component that causes the second component to access the first representation at the first component, determine a discrepancy and disregard the notification or recover the second representation from attributes of the first representation in response to determining the discrepancy. Further, there is no teaching in this proposed combination that disregarding the discrepancy comprises taking no action to synchronize the first and second representations in response to the event notification.

Applicants request review of the Examiner's findings that the above cited Crockett teaches the additional requirements of claim 7. (Final Office Action, pgs. 6-7) The above cited Crockett discusses how to mirror updates to a primary site to a secondary site. The Examiner has not cited any part of Crockett that teaches or suggests the specific claimed functionality that recovers the second representation by performing at least one of the following operations: i) clearing the second representation and rebuilding that representation from attributes of the first representation; ii) comparing the first and second representations in whole or in part, and copying from the first representation to the second representation attributes missing from the latter, while any of deleting or marking as missing attributes in the second representation indicative of components present in the second representation but not in the first representation;

and iii) copying from the first representation to the second representation one or more attributes indicative of any of (a) a component or relationships represented by an attribute in connection with which the discrepancy occurred, and (b) a component or relationship in a region a component or relationships represented by an attribute in connection with which the discrepancy occurred. In the cited sections of Crockett there is no mention or disclosure of the above discussed functionality to handle a discrepancy between an event notification concerning a change to a network topology and the first or second representations of that topology as claimed.

Claim 8 is patentable over the cited Crockett for the reasons discussed with respect to claim 1, because claim 8 includes many of the limitations of claim 1 that distinguish over the cited Crockett. Further, claim 8 provides additional requirements concerning when the event notification is disregarded. Applicants submit that nowhere does the cited Crockett, Callon or Dias anywhere teach or suggest any one of the specific seven occurrences that result in disregarding an event notification on a topology change. Instead, the cited Crockett discusses copying updates to a secondary storage (DASD) to maintain a write order and the cited Dias discusses filtering events detected by monitors.

The Examiner cited the same sections of Crockett cited with respect to claim 8 against claim 9. (Final Office Action, pgs. 9-10) Claim 9 is patentable over the cited Crockett (and other cited references) for the reasons discussed with respect to claim 8, because claim 9 includes many of the limitations of claim 8 that distinguish over the cited Crockett. Further, claim 9 provides additional requirements concerning determining the discrepancy and selectively recovering the second representations in response to any of the listed four occurrences. Applicants submit that the Examiner has not cited any part of Crockett, Callon, and Dias, alone or in combination, that teach or suggest any one of the specific claimed occurrences that result in selectively recovering the second representation.

Applicants request review of the Examiner findings that claims 5, 7, and 8 of Dias teach the additional requirements of claims 24 and 25. (Final Office Action, pgs. 17-18) The cited claim 5 mentions that failure events are reported to an event manager and that the event manager reports only selected ones of the events based on a filtering criteria. The cited claim 7 mentions monitoring nodes of a distributed system and subsystems, reporting detected events, filtering the events, and applying rules to filtered events to select a user defined recovery program. The cited

claim 8 mentions that the filtering includes at least one of event correlation, removal of duplicate events, and rollup.

Although the cited claims of Dias mention filtering events and performing a recovery action based upon certain rules being applied to the events, nowhere do the cited claims of Dias anywhere teach or suggest the specific claim requirements of recovering the second representation in response to the determined discrepancy comprising the first representation not reflecting the change indicated by the event notification and the second representation reflecting the change indicated by the event notification.

Applicants request review of the Examiner findings that the above discussed claims 5, 7, and 8 of Dias teach the additional requirements of claims 26 and 27. (Final Office Action, pg. 18) Although the cited claims of Dias mention filtering events and performing a recovery action based upon certain rules being applied to the events, nowhere do the cited claims of Dias anywhere teach or suggest the specific claim requirements that the event notification is disregarded in response to the determined discrepancy comprising the first representation and second representation not reflecting the change indicated by the event notification. Nowhere is there any teaching of the claim requirement of disregarding a notification if the first representation and second representation do not reflect the change indicated by the event notification.

Applicants request review of the Examiner findings that the above discussed claims 5, 7, and 8 of Dias teach the additional requirements of claims 28 and 29. (Final Office Action, pg. 18) Although the cited claims of Dias mentions filtering events and performing a recovery action based upon certain rules being applied to the events, nowhere do the cited claims of Dias anywhere teach or suggest the specific claim requirements of recovering the second representation if the first representation does not reflect the added device and the second representation reflects the added device, and disregarding the event notification if the first representation and the second representation do not reflect the added device.

Dated: November 13, 2007   By: /David Victor/
                                                      David W. Victor
                                                      Registration No. 39,867